



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/849,938	05/04/2001	Christophe Fouquet	SCH-87	8408
22827	7590	05/31/2005	EXAMINER	
DORITY & MANNING, P.A. POST OFFICE BOX 1449 GREENVILLE, SC 29602-1449			JARRETT, SCOTT L	
			ART UNIT	PAPER NUMBER
			3623	

DATE MAILED: 05/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/849,938	FOUQUET, CHRISTOPHE	
<b>Examiner</b>	<b>Art Unit</b>	Scott L. Jarrett	3623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 04 May 2001.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-50 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-50 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 23 August 2001 is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
     Paper No(s)/Mail Date \_\_\_\_\_.  
 4) Interview Summary (PTO-413)  
     Paper No(s)/Mail Date \_\_\_\_\_.  
 5) Notice of Informal Patent Application (PTO-152)  
 6) Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Objections***

1. Claims 16, 21 and 29 are objected to because of the following informalities: grammatical errors. Appropriate correction is required.

Regarding Claim 16, Page 25, Lines 17-18, reads "...comparing **selected of** said resource utilization data..." however there is not a list of elements to be selected from. Examiner interpreted the claim to intend to read "...comparing **selected of said the** resource utilization data..."

Regarding Claim 21, Page 26, Lines 5-6, reads "...assign **selected of** said templates to a facility...", however there is not a list of elements to be selected from. Examiner interpreted claim to intend to read "...assign **selected of said the** templates to a facility..."

Regarding Claim 29, Page 28, Lines 18-19, reads "...comparing **selected of** said resource utilization data...", however there is not a list of elements to be selected from. Examiner interpreted the claim to intend to read "...comparing **selected of said the** resource utilization data..."

***Claim Rejections - 35 USC § 101***

2. Claims 1-37 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of:

- (1) whether the invention is within the technological arts; and
- (2) whether the invention produces a useful, concrete, and tangible result.

For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the "progress of science and the useful arts" (i.e., the physical sciences as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For a process claim to pass muster, the recited process must somehow apply, involve, use, or advance the technological arts.

Additionally, for a claimed invention to be statutory, the claimed invention must produce a useful, concrete, and tangible result.

Regarding Claims 1-15, claims 1-15 only recite an abstract idea. The recited method for modeling the performance of a facility does not apply, involve, or use the technological arts since all of the recited steps can be performed in the mind of the user or by use of a pencil and paper. The claimed invention, as a whole, is not within the technological art as explained above claims 1-15 are deemed to be directed to non-statutory subject matter.

Mere intended or nominal use of a component, albeit within the technological arts, does not confer statutory subject matter to an otherwise abstract idea if the component does not apply, involve, use, or advance the underlying process. In the present case, none of the recited steps are directed to anything in the technological arts as explained above with the exception of the recitation of the terms "electronic storage" in claim 4 and "electronic media" in claim 15. Therefore, the terms discussed are taken to merely recite a field of use and/or nominal recitation of technology.

Further regarding Claim 1, Claim 1 merely recites the steps of assigning, collecting and normalizing (mathematical operation) a plurality of data elements (attributes) associated with the facility, this series of steps does not produce a useful, concrete, and tangible result.

Regarding Claims 16-37, claims 16-37 only recite an abstract idea. The recited method for creating dynamic facility models does not apply, involve, or use the technological arts since all of the recited steps can be performed in the mind of the user or by use of a pencil and paper. The claimed invention, as a whole, is not within the technological art as explained above claims 16-37 are deemed to be directed to non-statutory subject matter.

Mere intended or nominal use of a component, albeit within the technological arts, does not confer statutory subject matter to an otherwise abstract idea if the component does not apply, involve, use, or advance the underlying process. In the

Art Unit: 3623

present case, none of the recited steps are directed to anything in the technological arts as explained above with the exception of the recitation of the terms "electronic storage" in claims 26 and 34, and "electronic media" in claim 28. Therefore, the terms discussed are taken to merely recite a field of use and/or nominal recitation of technology.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-8, 11-18, 22, 24-31, 34-44 and 48-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Afsah, Shakeb, U.S. Patent No. 6,509,730 in view of Juneau, Mark Anthony, U.S. Patent Publication No. 2004/0015271.

Regarding Claims 1 and 38 Afsah teaches a method for modeling the performance of one or more facilities in relation to the facilities' resource utilization (environmental performance) wherein the system creates dynamic facility models (mathematical representation/characterization of the facility's performance; Abstract; Column 1, Lines 10-21; "The present invention also relates to a method of comparing the evaluated performances of multiple facilities against one another and the group of performance indicators used to evaluate one facility can be any combination of indicators whether the same or different from the group of indicators used to evaluate another facility.", Column 3, Lines 24-30; Column 3, Lines 21-61).

More specifically Afsah further teaches that the method for modeling (measuring, determining, calculation, etc.) the performance of a facility (factory, plant, business, etc.), in relation to the facility's resource (energy, water, etc.) utilization, comprises:

- assigning (selecting) a plurality predefined/user-defined of attributes

(performance indicators) to the facility (Column 2, Lines 5-25; Figure 1, Element 110; Figure 2, Element 210);

- obtaining (collecting, measuring, capturing, retrieving, etc.) facility resource utilization data (Column 5, Lines 43-50; "...indicator values of the respective environmental indicator collected from a plurality of facilities...", Claim 12);

- normalizing the resource utilization data (Column 2, Lines 25-54; "...distance of each indicator value...from its benchmark value...on a scale from 0 to 100%.", Column 4, Lines 44-46; Figure 1, Element 140; Figure 2, Element 250).

Afsah further teaches that the method for modeling the performance of a facility utilizes any of a plurality of attributes selected/created by the user (e.g. user-defined, predefined, industry standard/mandate) that may include the selection (assignment) a plurality of standard (typical, well known) metrics such as energy use, materials use, supplier, production, service and the like (Column 3, Lines 63-68; Column 4, Line 1-25).

While Afsah teaches the assignment (selection) of a set (list, catalog) of attributes (performance indicators) to one or more facilities Afsah does not expressly teach that the method for modeling the performance of a facility utilizes predefined templates that contain default data, the use of a template/facility editors or that the model is embodied as an apparatus (system).

Juneau teaches method and system for modeling the performance of one or more facilities (benchmarking, performance evaluation/assessment, facility modeling) in an analogous art for the purpose of allowing "... users to evaluate the operational and financial performance of a selected power generated asset by utilizing a pre-defined strategic model..." (i.e. predefined facility template; Paragraph 0005) and further "...assists the user to performance comparisons of various facilities..." (Paragraph 0005).

More specifically Juneau teaches that the method and system for modeling the performance of a facility utilizes a set of predefined attributes (strategic models, template, catalog, forms, etc.; Paragraphs 0049-0052; Figures 9, 15-16) wherein the templates have default (standard) values for attributes ("...input allows the user to select standard fuel analysis for coal, oil or natural gas or to input actual values...", Paragraph 0050) and further that the system provides an editor (user interface, electronic forms, etc.) enabling user to add, update or delete the plurality of attribute and facility information stored in a database (Paragraph 0070).

It would have been obvious to one skilled in the art at the time of the invention that the method for modeling the performance of a facility (benchmarking, performance evaluation/assessment) as taught by Afsah would have benefited from

- automating the performance modeling and benchmarking method making it easier for users to utilize the facility performance modeling method of Afsah; and

Art Unit: 3623

- utilizing, as part of the automated performance modeling system, an editor (form, interface, program) to manage a set of pre-defined and/or user-defined attributes, templates (strategic models) and other information (Juneau: Paragraphs 0049-0052, 0070); the resultant system providing a convenient mechanism for users to update a plurality of facility and performance data/information

in view of the teachings of Juneau's facility performance modeling system, both Afsah and Juneau being in the same field of endeavor and each addressing the same business challenge of modeling/evaluating the performance of one or more facilities (businesses, plants, factories, etc.); the resultant system providing the ability to model the performance of one or more facilities in a substantially automated manner.

Regarding Claims 16 and 29 Afsah teach a method for creating dynamic facility models wherein the models are related to the facility's resource utilization, and comparing the resource utilization efficiency of one or more facilities (modeling and benchmarking/comparing the performance of a facilities) comprising:

- creating (assigning, selecting, etc.) a set (list, catalog) of attributes (performance indicators) wherein the attributes are at least one of user-defined or system-defined variables (Column 3, Lines 63-68; Column 4, Lines 20-46; Claim 2);  
- assigning (selecting) a set (list, catalog) of attributes (user-defined or pre-defined) to the facility (Column 2, Lines 5-25; Column 3, Lines 63-68; Column 4, Lines 1-25; Figure 1, Element 110; Figure 2, Element 210);

- obtaining (collecting, measuring capturing, retrieving, etc.) facility resource utilization data (Column 5, Lines 43-50; "...values of the respective environmental indicator collected from a plurality of facilities...", Claim 12);

- normalizing the resource utilization data (Column 2, Lines 25-54; "...distance of each indicator value...from its benchmark value...on a scale from 0 to 100%.", Column 4, Lines 44-46; Figure 1, Element 140; Figure 2, Element 250) based on the set of selected attributes;

- comparing the resource utilization data for the purpose of benchmarking ("...evaluating the environmental performance of a facility based on a comparison of benchmark values of performance indicators..", Column 1 Lines 58-61); and

- generating at least one of a historical or real-time reports on the facility data (benchmark, resource utilization, etc.; Column 6, Lines 21-40; Figures 4-5).

While Afsah teaches the assignment (selection) of a set (list) of attributes to one or more facilities Afsah does not expressly teach that the method is an apparatus.

Juneau teaches a method and system for the evaluation the performance of a power generating facility, in an analogous art for modeling the performance (benchmarking) of a facility (Paragraph 0005), wherein the system utilizes a set (list, catalog) of predefined attributes (template, catalog, forms, etc.; Paragraphs 0049-0052; Figures 9, 15-16) wherein the templates have default (standard) values for attributes ("...input allows the user to select standard fuel analysis for coal, oil or natural gas or to

input actual values...”, Paragraph 0050) and further that the system provides an editor (user interface, electronic forms, etc.) enabling user to add, update or delete the plurality of attribute and facility information stored in a database (Paragraph 0070).

It would have been obvious to one skilled in the art at the time of the invention that the method for modeling the performance of a facility (benchmarking, performance evaluation/assessment) as taught by Afsah would have benefited from

- automating the performance modeling and benchmarking method making it easier for users to utilize the facility performance modeling method of Afsah; and

- utilizing, as part of the automated performance modeling system, an editor (form, interface, program) to manage a set (plurality, list, catalog) of pre-defined and/or user-defined attributes, templates (strategic models) and other information (Juneau: Paragraphs 0049-0052, 0070); the resultant system providing a convenient mechanism for users to update a plurality of facility and performance data/information

in view of the teachings of Juneau's facility performance modeling system, both Afsah and Juneau being in the same field of endeavor and each addressing the same business challenge of modeling/evaluating the performance of one or more facilities (businesses, plants, factories, etc.); the resultant system providing the ability to model/evaluate the performance of one or more facilities in a substantially automated manner via a convenient user interface.

Regarding Claim 2 Afsah teaches that the method for modeling the performance of a facility comprises the assignment/selection of a set (list, catalog) of attributes (performance indicators) to the model of the facility as discussed above.

Afsah further teaches that the method utilizes any of a plurality of performance indicators (attributes) to describe/model the performance of a facility and that the plurality of attributes are selected by the user (user-defined and/or pre-defined), wherein the selection includes the assignment (selection) of a plurality of standard (typical, well known, pre-defined) attributes such as energy use, materials use, supplier, production, service and the like (Column 3, Lines 63-68; Column 4, Line 1-25).

Regarding Claims 3, 17, 21 and 42 Afsah teaches that the method for modeling the performance of a facility through the creation of dynamic facility models enables the user to define, select, measure and compare a plurality of attributes including the use of well known (predefined, standard) attributes such as energy use, materials use, supplier, production, service and the like (Column 3, Lines 63-68; Column 4, Line 1-25).

Afsah does not expressly teach that the method for modeling the performance of a facility further comprises a template editor (module, component, etc.) to assign attributes to a facility.

Juneau teaches a method and system for the evaluation the performance of a power generating facility, in an analogous art for modeling the performance

(benchmarking) of a facility (Paragraph 0005), wherein the performance modeling system utilizes a set of predefined attributes (template, set, list, catalog; Paragraphs 0049-0052; Figures 9-10 and 15-16) and provides an editor (user interface) that enables the user to update (add, edit, delete) the plurality of attribute and facility information stored in the database (Paragraph 0070).

It would have been obvious to one skilled in the art at the time of the invention that the method for modeling the performance of a facility (benchmarking, performance evaluation/assessment) as taught by Afsah would have benefited from

- automating the performance modeling and benchmarking method making it easier for users to utilize the facility performance modeling method of Afsah; and
  - utilizing, as part of the automated performance modeling system, an editor (form, interface, program) to manage a set (plurality, list, catalog) of pre-defined and/or user-defined attributes, templates (strategic models) and other information (Juneau: Paragraphs 0049-0052, 0070); the resultant system providing a convenient mechanism for users to update a plurality of facility and performance data/information in view of the teachings of Juneau's facility performance modeling system, both Afsah and Juneau being in the same field of endeavor and each addressing the same business challenge of modeling/evaluating the performance of one or more facilities (businesses, plants, factories, etc.); the resultant system providing the ability to model/evaluate the performance of one or more facilities in a substantially automated manner via a convenient user interface.

Regarding Claims 4, 26, 34 and 40 Afsah teaches that the method for modeling the performance of a facility and creating dynamic facility models utilizes a plurality of facility data/information as discussed above.

Afsah does not expressly teach the method for modeling the performance of a facility utilizes an attributes list (set, catalog) maintained in an electronic storage.

Juneau teaches a method and system for the evaluation the performance of a power generating facility, in an analogous art for modeling the performance (benchmarking) of a facility (Paragraph 0005), wherein the system for creating dynamic facility models (i.e. facility performance modeling) utilizes a set (catalog, list) of predefined attributes and a plurality of predefined templates (catalogs, user interfaces, forms, etc.) to capture the plurality of facility attributes (Paragraphs 0049-0052; Figures 9-10 and 15-16) wherein the plurality of attributes are stored in a database (Paragraph 0008; Figure 1, Elements 34 and 16).

It would have been obvious to one skilled in the art at the time of the invention that the method for modeling the performance of a facility as taught by Afsah would have benefited from automating the performance modeling and benchmarking method and storage of a plurality of facility and performance data in a database in view of the teachings of Juneau, both Afsah and Juneau being in the same field of endeavor and

each addressing the same business challenge of modeling/evaluating the performance of one or more facilities (businesses, plants, factories, etc.); the resultant system providing for the ability to model the performance of one or more facilities in a substantially automated manner and a convenient mechanism to store, access and report on the plurality of facility and performance information collected (Juneau: Paragraph 0008).

Regarding Claims 5, 25, 35 and 41 Afsah does not teach that the method for modeling the performance of a facility further comprises the reclassification of attributes as claimed.

Official notice is taken that the creation of new categories (groupings, sets; i.e. the re-classification) of attributes (variables, metrics, data) based on a trigger such as the number of times a particular attribute has been used/referenced is old and well known in the art and provides a convenient mechanism for re-classifying (migrating, re-categorizing, etc.) user specific item (attributes, data elements, terms, etc.) into more generally available (system defined) items that can be accessed conveniently by anyone using the system.

For example, businesses in a particular industry wishing to create a standard of performance metrics would likely start by analyzing the plurality of performance metrics used by members in that industry (user-defined) and then agreeing to a common set of performance metrics to be used by everyone (system defined) in the industry (e.g.

standardizing on the most commonly used metrics) thereby making performance comparison, reporting and other business functions easier for everyone involved.

In a simple example, a dictionary contains a set of accepted (standard, accepted) of words and their associated definitions evolves over time as new words or alternative definitions are added (e.g. re-classified from being classified as vernacular/slang terms into the standard, acceptable language/term). More specifically this evolution takes place as dictionary's editors track word usage to decide which words to include in the dictionary and to determine what they mean, i.e. the dictionary's editors study the language as it's used and monitor which words people use most often and how they use them until the frequency or pervasiveness of the word reaches a threshold and the editor's decide to add the word to the dictionary.

It would have been obvious to one skilled in the art at the time of the invention that the method for modeling the performance of a facility, with its utilization of standard and user-defined attributes, as taught by Afsah would have benefited from continually adding/updating the list of pre-defined/standard attributes to include new attributes which are gaining in importance and/or interest (i.e. the attributes are being utilized/defined by more and more users of the method); the resultant system providing a convenient method for continually expanding the list of pre-defined (system defined, default) performance attributes thereby increasing the robustness/depth of the overall facility performance model created, analyzed and benchmarked.

Regarding Claims 6 and 20 Afsah teaches that the method and system for modeling the performance of a facility wherein the method normalizes performance attributes as part of the benchmarking (comparison) of one or more facilities as discussed above.

Afsah is silent on the specific mechanism that activates the data normalization step/process.

Official notice is taken that a plurality of mechanisms are well known in the art for triggering (starting, conducting, launching, executing, activating, etc.) processes (methods, threads, calculations, events, activities, etc.) including but not limited to the triggering of a process when the underlying data/information has been updated/changed (i.e. a user update to a facility model by modifying facility attributes), upon the demand/request of a user or at a predetermined/schedule/periodic time.

It would have been obvious to one skilled in the art at the time of the invention that the method for modeling the performance of a facility, specifically the method's process of normalizing the performance indicators (attributes), would have benefited from being capable of activating the normalization process (step) based on any one of the following events the modification of the underlying performance and/or facility data, user request/demand and/or at regularly scheduled time intervals; the resultant system

providing greater flexibility to the user (i.e. enabling automating data normalization when the underlying data had changed or at regularly scheduled times or on demand).

Regarding Claims 7, 18, 30 and 43 Afsah teaches that the method and system for modeling the performance of a facility further comprises the utilization of mandated or historical performance attributes as the baseline/benchmark for comparison ("...an historical baseline value can be used as the benchmarking value..."; Column 6, Lines 9-14).

Afsah does not expressly teach the estimating (predicting, calculating) facility attribute and resource utilization data for any period of time in the past.

Juneau teaches a method and system for the evaluation the performance of a power generating facility, in an analogous art for modeling the performance (benchmarking) of a facility (Paragraph 0005), wherein the method and system for the modeling the performance of one or more facilities wherein the system is "...configured to determine revenues likely to be generated by one or more plants, based upon actual historical operations and cost data and predicted operations and cost data..." (Paragraph 0042; Figures 1, 2) and that such calculations assist in determining the performance, in this case financial performance/worth, of the facility.

Juneau further teaches that the system utilizes standard (default, estimated) or actual attribute data (Paragraph 0050).

It would have been obvious to one skilled in the art at the time of the invention that the method for modeling the performance of a facility as taught by Afsah would have benefited from estimating/predicting one or more historical performance attribute data in view of the teachings of Juneau; the resultant system enabling users to model performance attributes for which data is not readily available or is best represented by typical (standard, estimated) data/values (Juneau: Paragraph 0050).

Regarding Claims 8, 22, 31 and 44 Afsah teaches that the method for modeling the performance of one or more facilities further comprises obtaining (collecting, capturing, retrieving, etc.) facility resource utilization data from a two or more facilities (Column 3, Lines 40-45; Column 5, Lines 43-50; "...identifying a first data group of indicator values of the respective environmental indicator collected from a plurality of facilities...", Claim 12).

Regarding Claim 11 Afsah teaches that the method for modeling the performance of a facility further comprises the comparison of the normalized resource utilization data for a user defined group of facilities (Column 6, Lines 21-40; Figure 4-5).

Regarding Claim 12 Afsah teaches that the method for modeling the performance of a facility further comprises the benchmarking of the facilities based on

the comparison of the normalized resource utilization data for a user defined/selected group of facilities (Abstract; Column 6, Lines 9-40; Figures 4-5).

Regarding Claim 13, 24 and 48 Afsah teaches that the method for modeling the performance of a facility further comprises presenting the data in at least one of a historical or real-time reports (Column 6, Lines 21-40; Figures 4-5).

Regarding Claims 14, 27, 36 and 50 Afsah teaches a method for modeling the performance of a facility wherein the resource utilization data is at least one of (selected from) energy, water, natural gas or oil (Column 3, Lines 31-36 and 63-68; Column 4, Lines 1-20).

Regarding Claims 15, 28 and 37 Afsah does not teach that the method for modeling the performance of a facility utilizes data are provided via a intercommunicating electronic media (e.g. Internet, fax, phone, email, etc.).

Juneau teaches a method and system for the evaluation the performance of a power generating facility, in an analogous art for modeling the performance (benchmarking) of a facility (Paragraph 0005), wherein the method and system for modeling the performance of one or more facilities utilizes a computer network (Internet) to collect, analyze, and report a plurality of performance/benchmark information to/from a customer (Paragraphs 0036, 0044; Figure 1).

It would have been obvious to one skilled in the art at the time of the invention that the method for modeling the performance of a facility as taught by Afsah would have benefited from automating the performance modeling and benchmarking method and communicating (providing, collecting, etc.) the plurality of performance and benchmarking information over the Internet in view of the teachings of Juneau; the resultant system providing for the ability to model the performance of one or more facilities in a substantially automated manner and provide a convenient media and/or interface for communicating the plurality of performance information and results.

Regarding Claim 39 Afsah teaches that the method for modeling the performance of a facility enables user to create and edit (revise) new facilities and attributes (i.e. inherently facilities and attributes would be added and modified as part of the modeling/performance assessment steps; Abstract; Column 3, Lines 21-46).

Afsah does not expressly teach that the method for modeling the performance of a facility provides an editor for managing the plurality of facilities and/or attributes as claimed.

Juneau teaches a method and system for the evaluation the performance of a power generating facility, in an analogous art for modeling the performance (benchmarking) of a facility (Paragraph 0005), wherein the method and system for

modeling the performance of one or more facilities further comprises an editor (user interface) to edit/manage the plurality of facility and performance attributes wherein the editor performs at least one of (selected of): creating, adding and removing attributes from the system (Paragraph 0070).

It would have been obvious to one skilled in the art at the time of the invention that the method for modeling the performance of a facility as taught by Afsah would have benefited from providing an editor (user interface, form) to manage (edit, add, update, delete, etc.) the plurality of facility and performance information in view of the teachings of Juneau; the resultant system providing a convenient user interface (editor) for managing the plurality of benchmarking, performance and facility information.

Regarding Claim 49 Afsah teaches that the method for modeling the performance of one or more facility further comprises providing the user (customer) with at least one of the following: a set of predefined performance indicators (attributes), resource utilization data, data normalization means and historical and/or real-time reports as discussed above.

Afsah does not teach that the method enables the electronic access by users to the plurality of information or features as claimed.

Juneau teaches a method and system for the evaluation the performance of a power generating facility, in an analogous art for modeling the performance (benchmarking) of a facility (Paragraph 0005), wherein the method and system for modeling the performance of one or more facilities further comprises providing (supplying) customer (user) access electronically (Internet) to at least one of the following (selected of):

- predefined template (Paragraphs 0005, 0049-0052; Figures 9, 15-16);
- resource utilization collection means (Paragraph 0044);
- default facility attribute data (Paragraph 0050); and
- historical and real-time reports (Paragraphs 0042, 0071).

It would have been obvious to one skilled in the art that the method for modeling the performance of a facility as taught by Afsah would have benefited from providing template, resource utilization collection, default facility attribute data and a plurality of reports electronically over the Internet in view of the teachings of Juneau; the resultant system providing convenient access to users (customers) over the Internet.

5. Claim 9-10, 19, 23, 32-33 and 45-47 is rejected under 35 U.S.C. 103(a) as being unpatentable over Afsah, Shakeb, U.S. Patent No. 6,509,730 in view of Juneau, Mark Anthony, U.S. Patent Publication No. 2004/0015271 as applied to claims 1-8, 11-18, 22, 24-31, 34-44 and 48-50 above and further in view of Machin et al., U.S. Patent No. 6,877,03.

Regarding Claims 9, 19, 32 and 45-46 Afsah teaches a method for modeling the performance of a facility through the creation and analysis of dynamic models as discussed above. Afsah further teaches the classification/categorization of the plurality of performance attributes (e.g. energy use, supplier, transportation, etc.; Column 3, Lines 63-68; Column 4, Lines 1-20) as well as the selection (grouping) of one or more facilities and the associated performance attributed to be benchmarked (i.e. a user defined group of facilities; Column 1, Line 29-37; Column 3, Lines 39-47).

Neither Afsah nor Juneau expressly teaches that the method for modeling the performance of a facility further comprises aggregating (grouping, clustering, segmenting, etc.) the resource utilization and/or facility attribute data based (according to) user defined criteria.

Machin et al. teaches performance evaluation through benchmarking, in an analogous art for modeling the performance/benchmarking of a facility (Abstract), wherein the online method and system (apparatus) for modeling the performance of one

or more facilities further comprises the aggregating of resource utilization and facility attribute data into peer groups (user defined criteria) for the purpose of comparing/benchmarking the facilities in the peer group (Column 7, Lines 14-40).

More generally Machin et al. teach an online method and system for modeling the performance of one or more facilities wherein the system utilizes pre-defined templates (surveys, questionnaire) of pre-defined attributes to "...enables business process managers to compare their performance data with that of a group of industry peers having characteristics specifically defined by the manager...", (Column 1, Lines 61-65; Column 3, Lines 26-33; Figures 9, 12-13).

It would have been obvious to one skilled in the art at the time of the invention that the method for modeling the performance of a facility as taught by the Afsah-Juneau combination would have benefited from enabling the aggregation of a plurality of information into (peer) groups of facilities thereby providing a convenient mechanism for benchmarking a plurality of different aggregations (groups) of facilities utilizing the same and/or different set of attributes; the resultant system providing a more robust reporting and analyzing capabilities.

Regarding Claims 10, 23 and 33 Afsah teaches that the method for modeling the performance of a facility includes the utilization of a plurality of attributes and further that the attributes can be any combination or other attributes ("...based on any combination of performance indicators...", Column 3, Lines 40-42; Column 3, Lines 25-46) and that

the plurality of performance indicators (attributes) and their benchmark values are aggregated into a sum representing the normalized performance of one or more facilities (distance; Column 4, Lines 60-68; Column 5, Lines 1-41).

Regarding Claim 47 Afsah teaches that the method for modeling the performance of a facility provides for a plurality of benchmark reports wherein the plurality of selected-modeled facilities are compared (Column 6, Lines 10-40; Figures 4-5).

Neither Afsah nor Juneau expressly teaches that the ranking of facilities as claimed.

Machin et al. teaches performance evaluation through benchmarking, in an analogous art for modeling the performance/benchmarking of a facility (Abstract), wherein the method and system for modeling the performance of a facility further comprises the ability to rank selected facilities ("...peer group ranking report...", Column 10, Lines 67-68; Column 11, Lines 1-3; Figure 10) for comparison/benchmarking purposes.

It would have been obvious to one skilled in the art at the time of the invention that the method for modeling the performance of a facility, specifically the methods development of a benchmarking/performance evaluation reports, as taught by the

Afsah-Juneau combination would have benefited from ranking the plurality of modeled facilities in view of the teachings of Machin et al.; the resultant system providing additional reports enabling users to further analyze the modeled facilities' performance.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Jutsen, Jonathan, U.S. Patent No. 6,701,298, teaches a method and system for modeling the energy performance of a facility in relation to the resource utilization of the facility.
- Horn et al., U.S. Patent No. 6,754,673, teach an online method and system for modeling and assessing the performance of a facility wherein a facilities resource utilization, among other performance attributes, is compared/benchmarked with one or more facilities and stored in a historical database of performance and facility data.
- Alling, Eric R., U.S. Patent Publication No. 2002/0194329, teaches a method and system for modeling the performance and benchmarking of a plurality of facilities wherein the system utilizes established industry wide benchmarking data, provides a plurality of reports, stores a plurality of data in an electronic storage device and rates facilities on their efficiency.
- Hoffman et al., U.S. Patent Publication No. 2003/0018513, teach a method and system for benchmarking facilities (businesses, suppliers, etc.) in a supply chain.
- Camp, Robert, Benchmarking the search for industry best practices that lead to superior performance, teaches a plurality of well known benchmarking (performance evaluation, performance modeling) tools, techniques and methods.
- Ross, Phillip, Energy Benchmarking for the Glass Industry, teaches the application of well known benchmarking tools, methods and techniques to enable the

businesses in the glass industry to model and compare (benchmark) the energy performance of their facilities. More specifically Ross teaches that a significant benchmarking effort was conducted by the Department of Energy and Argonne wherein standardized (template, a set of) performance attribute data collected was aggregated, analyzed and reported on.

- Miakisz, Joseph, Environmental performance benchmarking for electric utilities, teaches the modeling of US and Canadian facilities using 80 pre-defined/standard performance attributes (metrics) as part of the environmental benchmarking program.

- Electric Generation Performance Benchmarking Subscription Service Announced by Metzler & Associates, teaches the well established practice of modeling the performance of a facility for internal and peer group benchmarking. The article further teaches the commercial availability of a facility modeling system that "...serves as an industry standard for reporting plant performance information..."

- Carver, Helen et al., Energy efficient ceramics production, teaches the "UK Government's Energy Efficiency Best Practices Programme" that provides businesses with standard tools/techniques for assessing how much energy they use and provide for the comparison (benchmarking) of the company's facility performance with other companies.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott L. Jarrett whose telephone number is (571) 272-7033. The examiner can normally be reached on Monday-Friday, 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hafiz Tariq can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

5/19/2005

SJ  


  
TARIQ R. HAFIZ  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600